

REMARKS

Claims 39 through 64 were presented for examination in the present application. This Amendment adds new claims 65 through 68. Thus, claims 39 through 68 are presented for consideration upon entry of this Amendment.

Applicants wish to thank the Examiner for his time to interview the present application via telephone on February 9, 2005.

Claims 39-42, 44-45, 49-50, 52, 54, 56, 58, 60, and 64 were rejected under 35 U.S.C. §103 over U.S. Patent No. 4,917,495 to Steenhoek (Steenhoek). Claims 43, 46-48, 51, 53, 55, 57, 59, and 61-63 of the present application were rejected under 35 U.S.C. §103 over Steenhoek in view of U.S. Patent No. 5,268,749 to Weber, U.S. Patent No. 5,619,427 to Ohkubo, U.S. Patent No. 4,918,321 to Klenk, U.S. Patent No. 5,596,412 to Lex, and the present application's own disclosure.

With respect to Steenhoek, the Office Action asserts that the conventional quartz halogen lamp of Steenhoek is the functional equivalent of the claimed light diode.

Applicants respectfully traverse this rejection.

Components which are functionally or mechanically equivalent are not necessarily obvious in view of one another. *In re Scott*, 323 F.2d 1016, 139 USPQ 297 (CCPA 1963). In the *Scott* case, claims were drawn to a hollow fiberglass shaft for archery and a process for the production thereof where the shaft differed from the prior art in the use of a paper tube as the core of the shaft as compared with the light wood or hardened

foamed resin core of the prior art. The Board found the claimed invention would have been obvious, reasoning that the prior art foam core is the functional and mechanical equivalent of the claimed paper core. The court reversed, holding that components which are functionally or mechanically equivalent are not necessarily obvious in view of one another, and in this case, the use of a light wood or hardened foam resin core does not fairly suggest the use of a paper core.

Independent claims 39 and 56 each recite, in part, a light diode.

Steenhoek discloses conventional quartz halogen lamp.

The present application, at pages 5 and 6, clearly sets out what the Applicants determined to be the problems of using the conventional quartz halogen lamp of Steenhoek and the Applicants solution to these problems, namely the claimed light diode. For example, the present application determined that a decisive advantage of the light diode is that the position of the light source and the amount of emitted light is precisely defined. Further, the present application determined that the light diode allows for an increased frequency of measurement as compared to typical light bulbs. In addition, the present application clearly sets out at page 2 a further problem associated with the halogen light source of Steenhoek, namely that the filament ages and part of it vaporizes where the vaporized material coats the inside of the surrounding glass body. As a result, the spectral emissions of the filament and the spectral transmitting distribution of the surrounding glass body change over time.

Therefore, it is respectfully submitted that the

conventional quartz halogen lamp of Steenhoek does not disclose or suggest the light diode of claims 39 and 56. As such, claims 39 and 56, as well as claims 40 through 55 and 57 through 64 that depend therefrom, are believed to be in condition for allowance.

Independent claim 39 also recites, that the light diode is "aligned at a first predetermined angle". Similarly, independent claim 56 also recites the step of aligning the light diode at "a first predetermined angle".

It is respectfully submitted that the conventional quartz halogen lamp of Steenhoek requires a filament. The position of the filament can be effected by movement, even minor movements such as shaking or vibration. Thus, it is submitted that the halogen lamp of Steenhoek can, at best, be aligned to a range of angles.

Clearly, the alignment to a range of angles disclosed by Steenhoek does not disclose or suggest the light diode that is "aligned at a first predetermined angle to the surface" or the step of aligning the light diode at "a first predetermined angle to the surface" of claims 39 and 56, respectfully.

Therefore, it is also respectfully submitted that the conventional quartz halogen lamp of Steenhoek does not disclose or suggest the predetermined angle of claims 39 and 56.

Again, claims 39 and 56, as well as claims 40 through 55 and 57 through 64 that depend therefrom, are believed to be in condition for allowance.

In view of the above, reconsideration and withdrawal of the rejections to claims 39 through 64 are therefore respectfully requested.

Dependent claims 55 and 57 were rejected over Steenhoek in view of the present application at page 5, line 27.

Applicants respectfully traverse this rejection.

Dependent claim 55 recites a measurement cycle of less than 0.2 seconds. Similarly, dependent claim 57 recites the step of determining said at least one characteristic comprises a measurement cycle of less than 0.2 seconds.

The portion of the specification asserted against claims 55 and 57 is within the section entitled "Brief Summary of the Invention". Thus, the portion of the present application cited by the Office Action is included in a list of advantages available from the present invention.

It is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious. *In re Fritch* 23 U.S.P.Q.2d 1780, 1784 (Fed. Cir. 1992).

It is respectfully submitted that use of Applicants' disclosure of the advantages of their invention to render that invention obvious is improper. Accordingly, claims 55 and 57 are believed to be in condition for allowance. Reconsideration and withdrawal of the rejection to claims 55 and 57 are respectfully requested.

New claims 65 through 68 have been added to point out various aspects of the present application. Support for new claims 65 through 68 can be found in the specification at least at pages 5 and 6.

New claims 65 through 68 are also believed to be in condition for allowance for at least the reason that they depend from claims 39 and 56, respectively.

In addition, claims 65 and 67 recite that the light diode comprises a light emitting member, said light emitting member having a precisely defined position within the light diode, wherein said precisely defined position does not vary over time. Again, the conventional quartz halogen lamp of Steenhoek requires a filament where the position of the filament can be effected by movement, even minor movements such as shaking or vibration. Thus, the halogen lamp of Steenhoek clearly lacks the light emitting member having a precisely defined position within the light diode that does not vary over time as recited by claims 65 and 67.

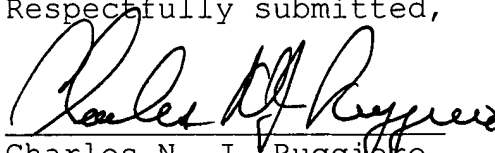
Claims 66 and 68 recite that the first predetermined angle does not vary over time. Clearly, the conventional quartz halogen lamp of Steenhoek having a filament that is moveable does not disclose or suggest the angle that does not vary over time as recited by claims 66 and 68.

In view of the above, it is respectfully submitted that the present application is in condition for allowance. Such action is solicited.

If for any reason the Examiner feels that consultation with Applicants' attorney would be helpful in the advancement of the prosecution, the Examiner is invited to call the telephone number below.

Respectfully submitted,

February 17, 2005



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